MERIT AUDIT REPORTS	1ST QTR (covers 4th QTR 2015)	2ND QTR (covers 1st QTR 2016)	3RD QTR (covers 2nd QTR 2016)	4TH QTR (covers 3rd QTR 2016)
Date Complete:	1/21/2016	4/18/2016	8/9/2016	
Calibration Verification Report	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
All LDAR Plan procedure current?	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
Certified Gas Sheets	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
Inspection Archived Reports	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
Abnormal time stamp Report (QAQC Reports)	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
Precision Calibrations	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
ELPCD training up to date	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
Low E cert's	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
Component Summary Reconcile	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
DTM % Report	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
DTM Detail Report	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
UTM report	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
Delayed Repairs Report	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
Leak Summary Report	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
Late Final Repairs	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
Open Ended Lines	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
QAQC Dwell Time Report	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
QAQC Overlap Report	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
Removals Report	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
Added Components	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
POS Report	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
Substantiate Leak %	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
Unrepaired Leaks Report	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	Chris Taylor "EMSI"/Sean Craven "Merit"	
Field Audits done and filed???	Yes	Yes	Yes	
Signatures	CT SC 1/21/16	CT SC 4/18/16	CT 8/9/16 SC	

* Run all reports for the previous quarter, list all findings and fixes below. Initial and date the report as reviewed and file the report.

Action Items Found/Changes Made

Q4 2015: 1. EMSI needs to make sure we have all the calibration sheets signed immediately after the day is complete, all sheets will be printed off and signed before leaving the plant for the day. 2. 4 days had inspections over 500 were verified as "ok", 1 day with insuficient "Components Monitored Per Minute" but they were all Flare Visuals that are required annually visual and not Method 21. 3. Make sure the POOS report has LDAR MOC for all pumps and valves added or removed on or after 10/20/2015.

Q1 2016: No issues identified

Q2 2016: No issues identified

Action Items reviewed with LDAR personnel?(Y/N)	Yes	Yes	Yes

QA/QC Descriptions

ACTION	EXPLANATION
Calibration Verification Report	Run Calibration Verification report and make sure we have signed hardcopies of each one on file for the period we are running
All LDAR Plan procedures current?	LDAR written plan should match what is being done. Any outdated procedures needs to be removed
Certified Gas Sheets	Ensure we have a file of current gases used and active gases used. Go into GW pull up "Monitoring and Maintenance" tab then click on View/Edit Calibration Cylinders- you should have a hardcopies of all gases that are in the database. The ones that are checked as "active" should be the ones the techs are currrently using
Inspection Archived Reports	Go to Archived Reports, sort them by frequency and check all of them for the period being audited, they should all say 100%
Abnormal time stamp Report (QAQC Reports)	Run the report and look for any days were we had more than 20 components with the same number. If found - provide an explanation and file
Precision Calibrations	PC's should all be in the database and you should have 2 PC's per quarter. If we have more than 2 machines used for that period there should be at least a precision done on each machine used in that period that occurs before monitoring has been performed. Also, ask the LDAR guys if there were machines sent back or returned from maintenance that were used, dates they were sent out and returned as well as followup precisions that occurred before being used again for monitoring
ELPCD training up to date	Make sure all contractors and maintenance LDAR personnel are current with training
Low E cert's	Make sure that all repackings and replacements have low e certification
Component Summary Reconcile	Your Component Summary report should look the same each month, if any number goes up it should be on the Added Components report, if they go down they should be on the permanently OOS report. All additions and subtractions should be tracked with a MOC # listed on the both reports.
DTM % Report	Run the DTM Percentage report and make sure that we are under 3%.
DTM Detail Report	Run the DTM report and make sure all the components on DTM are still legitimate (random selection of walkdowns) and make sure the reasons match what NSPS allows word for word.
UTM report	Make sure all UTM's are still applicable and make sure reasonings match the NSPS requirement word for word
Tech Performance per day report(Inspection Count by date)	An abnormal amount of inspections per day here at Merit would be any day that is over 500 components. We need explanations and sign offs if/when this occurs
Delayed Repairs Report	Make sure all DOR's are scheduled to be replaced during the next shutdown and make sure all DOR's have shutdown tag on them (this is different than a leaker tag), verify that they have been inspected monthly, verify that any DOR taken off the list was inspected within 15 days of being returned to service. Verify proper sign-offs have been recorded for all DORs
Leak Summary Report	Review the Leak Summary report
Late Final Repairs	Review the Late Repairs report
Open Ended Lines	Review the OEL report make sure all reported are plugged (verify with LDAR guys)
QAQC Dwell Time Report	Everything onsite should at least have 10 seconds monitoring time, run the report for the period, talk to the guys about spending the proper amount of time of each component
QAQC Overlap Report	Run the report - there should NEVER be any overlapped times
Removals Report	Make sure that all listed either have an MOC or if temporary out of service - should be walked down and remonitored if back in service T
Added Components	All added components should have a MOC. Correlate with MOC binder
POS Report	All POOS components should have a reason why and an MOC. Correlate with MOC binder
Substantiate Leak %	Print the leak percentage from current and previous quarters and compare.
Unrepaired Leaks Report	Run unrepaired leak report. Should have 0 unrepaired leaks

All reports mentioned are from Guideware

4th Qtr 2015

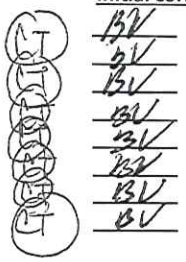
EMSI LDAR Technician Assessment

Initial Calibration

1. What are the steps to the initial calibration?(Initial each correct answer, place an "x" any answer that is missed)
   a. Warmup the TVA @ least 30 minutes
   b. Calibrate Zero Air
   c. Calibrate Span 1(Purge w/ zero air)
   d. Calibrate Span 2(Purge w/ zero air)
   e. Calibrate Span 3(Purge w/ zero air)
   f. Exit out and go into to "Run" screen
   g. Check calibration ranges to -/+ 10%
   h. Did the tech demonstrate the steps properly?

037/507/2019/9975

Initial correct



BV
BV
BV
BV
BV
BV
BV
BV

Drift Assessment (Midday or End of Day)

1. What are the steps to a drift assessment?
   a. Check calibration ranges to -/+ 10%
   b. Did the tech demonstrate this properly?

518/1998/9976

BV
BV
BV
BV

Field Method 21

1. What is the definition of Method 21?
   a. Procedure used to identify equipment leaks
   b. Does the tech properly demonstrate Method 21?
   c. Pump
   d. Valve
   e. Control Valve
   f. Connector

BV
BV
BV
BV
BV
BV
3V

Leaks

1. Whats the indication of a leak?
2. What is a meter deflection (blurb)?
3. How long do you wait if you have a blurb in the TVA?

BV
BV
BV

Areas discussed for improvement/ What was changed or corrected(List effective date for changes)

No Issues Observed

Signatures (sign below)I have been assessed and my areas of review have been discussed

12-9-15
Tech Signature/Date

12/9/15
Auditor Signature/Date

12/9/2015

1st Qtr 2016

EMSI LDAR Technician Assessment

Initial Calibration #10025

1. What are the steps to the initial calibration?(Initial each correct answer, place an "x" any answer that is missed)

	Initial correct
a. Warmup the TVA @ least 30 minutes	SC
b. Calibrate Zero Air	SC
c. Calibrate Span 1(Purge w/ zero air)	SC
d. Calibrate Span 2(Purge w/ zero air)	SC
e. Calibrate Span 3(Purge w/ zero air)	SC
f. Exit out and go into to "Run" screen	SC
g. Check calibration ranges to -/+ 10% 1.5/496/1932 ~~997~~ 10000	SC
h. Did the tech demonstrate the steps properly?	SC

Drift Assessment (Midday or End of Day)

1. What are the steps to a drift assessment?

	Initial correct
a. Check calibration ranges to -/+ 10% 5.02/204.0/10,200+	SC
b. Did the tech demonstrate this properly?	SC
	SC

Field Method 21

1. What is the definition of Method 21?

	Initial correct
a. Procedure used to identify equipment leaks	
b. Does the tech properly demonstrate Method 21?	SC
c. Pump	SC
d. Valve	SC
e. Control Valve	SC
f. Connector	SC

Leaks

1. Whats the indication of a leak?
2. What is a meter deflection (blurb)?
3. How long do you wait if you have a blurb in the TVA?

Areas discussed for improvement/ What was changed or corrected(List effective date for changes)

Pump M21 - Work w/ Joe so that he's confident & knows how to properly M21 All pump types.
- Joe is new and just started this month (January 2016)

Signatures (sign below)I have been assessed and my areas of review have been discussed

[signature] 1/19/16 [signature] 1/19/16

Tech Signature/Date

Auditor Signature/Date

VLV M21 - Work w/ Joe on specific valve types he is NOT used to monitoring to ensure he is fully trained on M21 requirements.

1st Qtr 2016

EMSI LDAR Technician Assessment

Initial Calibration TVA #10638

1. What are the steps to the initial calibration?(Initial each correct answer, place an "x" any answer that is missed)

Initial correct

   a. Warmup the TVA @ least 30 minutes
   b. Calibrate Zero Air
   c. Calibrate Span 1(Purge w/ zero air)
   d. Calibrate Span 2(Purge w/ zero air)
   e. Calibrate Span 3(Purge w/ zero air)
   f. Exit out and go into to "Run" screen
   g. Check calibration ranges to -/+ 10% .03 / 504 / 1964 / 9874
   h. Did the tech demonstrate the steps properly?

Drift Assessment (Midday or End of Day)

1. What are the steps to a drift assessment?
   a. Check calibration ranges to -/+ 10% 475 / 1910 / 9916
   b. Did the tech demonstrate this properly?

Field Method 21

1. What is the definition of Method 21?
   a. Procedure used to identify equipment leaks
   b. Does the tech properly demonstrate Method 21?
   c. Pump
   d. Valve
   e. Control Valve
   f. Connector

Leaks

1. Whats the indication of a leak?
2. What is a meter deflection (blurb)?
3. How long do you wait if you have a blurb in the TVA?

Areas discussed for improvement/ What was changed or corrected(List effective date for changes)

No Issues Observed

Signatures (sign below)I have been assessed and my areas of review have been discussed

1/19/16

Tech Signature/Date

Auditor Signature/Date

EMSI LDAR Technician Assessment

Initial Calibration

1. What are the steps to the initial calibration?(Initial each correct answer, place an "x" any answer that is missed)

Initial/Correct

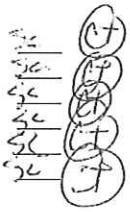
   a. Warmup the TVA @ least 30 minutes
   b. Calibrate Zero Air
   c. Calibrate Span 1(Purge w/ zero air)
   d. Calibrate Span 2(Purge w/ zero air)
   e. Calibrate Span 3(Purge w/ zero air)
   f. Exit out and go into to "Run" screen
   g. Check calibration ranges to -/+ 10%
   h. Did the tech demonstrate the steps properly?

Drift Assessment (Midday or End of Day)

1. What are the steps to a drift assessment?
   a. Check calibration ranges to -/+ 10%
   b. Did the tech demonstrate this properly?

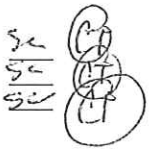
Field Method 21

1. What is the definition of Method 21?
   a. Procedure used to identify equipment leaks
   b. Does the tech properly demonstrate Method 21?
   c. Pump
   d. Valve
   e. Control Valve
   f. Connector



Leaks

1. Whats the indication of a leak?
2. What is a meter deflection (blurb)?
3. How long do you wait if you have a blurb in the TVA?



Areas discussed for improvement/ What was changed or corrected(List effective date for changes)

(1) Pay attention to detail (2) Monitoring box training
(3) Going 360° around ALL M21 points (4) Leak Questions + Answers

Signatures (sign below)I have been assessed and my areas of review have been discussed

Tech Signature/Date

Auditor Signature/Date 4/18/16

4/18/2016

8/9/16

EMSI LDAR Technician Assessment

Initial Calibration

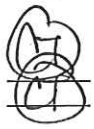
Unit 10019 - Joe

1. What are the steps to the initial calibration?(Initial each correct answer, place an "x" any answer that is missed)

Initial correct

   a. Warmup the TVA @ least 30 minutes
   b. Calibrate Zero Air
   c. Calibrate Span 1(Purge w/ zero air)
   d. Calibrate Span 2(Purge w/ zero air)
   e. Calibrate Span 3(Purge w/ zero air)
   f. Exit out and go into to "Run" screen
   g. Check calibration ranges to -/+ 10%
   h. Did the tech demonstrate the steps properly?

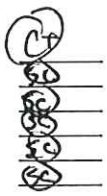
Drift Assessment (Midday or End of Day)



1. What are the steps to a drift assessment?
   a. Check calibration ranges to -/+ 10%
   b. Did the tech demonstrate this properly?

Field Method 21

1. What is the definition of Method 21? Does not Know



   a. Procedure used to identify equipment leaks
   b. Does the tech properly demonstrate Method 21?
   c. Pump
   d. Valve
   e. Control Valve
   f. Connector

Areas discussed for improvement

Signatures (sign below)I have been assessed and my areas of review have been discussed

Tech Signature

Auditor Signature

8/9/16

ALAN

EMSI LDAR Technician Assessment UNSD #10025

Initial Calibration

1. What are the steps to the initial calibration?(Initial each correct answer, place an "x" any answer that is missed)

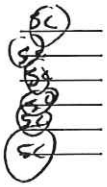
Initial correct

   a. Warmup the TVA @ least 30 minutes ✓
   b. Calibrate Zero Air ✓
   c. Calibrate Span 1(Purge w/ zero air) ✓
   d. Calibrate Span 2(Purge w/ zero air) ✓
   e. Calibrate Span 3(Purge w/ zero air) ✓
   f. Exit out and go into to "Run" screen ✓
   g. Check calibration ranges to -/+ 10% ✓
   h. Did the tech demonstrate the steps properly?

Drift Assessment (Midday or End of Day)

1. What are the steps to a drift assessment?
   a. Check calibration ranges to -/+ 10%
   b. Did the tech demonstrate this properly?

Field Method 21



1. What is the definition of Method 21?
   a. Procedure used to identify equipment leaks
   b. Does the tech properly demonstrate Method 21?
   c. Pump
   d. Valve
   e. Control Valve
   f. Connector

Areas discussed for improvement

Signatures (sign below)I have been assessed and my areas of review have been discussed

Tech Signature

8/9/16

Auditor Signature

8/9/16